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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,804	01/13/2006	Jacques Petitjean	Q87645	8919
23373	7590	10/11/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LAVILLA, MICHAEL E	
			ART UNIT	PAPER NUMBER
			1775	

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/532,804

Applicant(s)

PETITJEAN ET AL.

Examiner

Michael La Villa

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20050426, 20050519.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 4-15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-15 have not been further treated on the merits.

Information Disclosure Statement

2. Examiner-initialed documents on applicant's IDSs, filed on 26 April 2005 and 19 May 2005, which are not in the English language, have only been considered to the extent that applicant has provided an English-language Abstract of the document or the documents have been commented on in the IPER and/or ISR filed in this application on 26 April 2006. Crossed-out documents on applicant's IDS of 19 May 2005 are duplicative of documents that have been considered by the Examiner in the IDS of 26 April 2006.

Specification

3. Two copies of Specifications have been submitted in this application. The copy of the Specification with a filing date of 26 April 2005 is considered the pending Specification. Absent a justification otherwise, the Specification filed on 19 May 2005 will not be considered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
5. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Regarding Claim 1, it is unclear what is meant by the phrase "bare sheet." It is unclear whether this refers to a "bare steel sheet." If not, it is unclear what is required by specifying that the sheet is "bare." It is unclear what sorts of surfaces render a sheet not bare or covered.
8. Regarding Claim 3, it is unclear what is meant by the phrase "chosen from the group formed by." It is unclear whether this language equivalent to the phrase "material selected from the group consisting of"? It is unclear what is meant by the phrase "it being possible." It is unclear whether this phrase means that electrically conductive particles may optionally be present, that they are necessarily present, or that they have the capability of being present.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
10. A person shall be entitled to a patent unless –
11. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
12. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin USPN 4,425,198. Martin teaches coating a bare steel sheet with a zinc/polyacrylamide layer, wherein the number of monomer units in the polyacrylamide would be expected to meet the claimed requirement since the

polymer molecular weight is 1000. See Martin (col. 2, line 35 through col. 3, line 25; and col. 5, lines 15-29). Martin does not explicitly teach the weight percentage of polyacrylamide in the zinc layer, but does teach that the amount of polyacrylamide can be varied to affect the degree of brightness of the coating. Moreover, applicant teaches that 1 g/l of polyacrylamide, which is the amount used by Martin, results in inventive coatings. See Specification (page 5, lines 11-30). Since the concentration of Martin has been explained to provide inventive coatings, the claimed concentration can be presumed to be satisfied, absent evidence to the contrary.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin USPN 4,425,198. Martin teaches coating a bare steel sheet with a zinc/polyacrylamide layer, wherein the number of monomer units in the polyacrylamide would be expected to meet the claimed requirement since the polymer molecular weight is 1000. See Martin (col. 2, line 35 through col. 3, line 25; and col. 5, lines 15-29). Martin does not explicitly teach the weight percentage of polyacrylamide in the zinc layer, but does teach that the amount of polyacrylamide can be varied to affect the degree of brightness of the coating. Moreover, applicant teaches that 1 g/l of polyacrylamide, which is the amount used by Martin, results in inventive coatings. See Specification (page 5, lines 11-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to vary the degree of brightness in the coatings of Martin, as desired, and thereby affect the amount of polyacrylamide in the zinc coating. It would have been obvious to one of ordinary skill in the art at the time of the invention to effectuate this variation by changing plating conditions. Since applicant teaches that coatings applied at 1 g/l, which is Martin's concentration, form inventive coatings, it would be expected, absent evidence to the contrary, that some of these obvious coatings would be encompassed by the claimed amounts of polyacrylamide.

16. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin USPN 4,425,198 in view of Shindou et al. USPN 5,188,905. Martin teaches coating a bare steel sheet with a zinc/polyacrylamide layer, wherein the number

of monomer units in the polyacrylamide would be expected to meet the claimed requirement since the polymer molecular weight is 1000. See Martin (col. 2, line 35 through col. 3, line 25; and col. 5, lines 15-29). Martin does not explicitly teach the weight percentage of polyacrylamide in the zinc layer, but does teach that the amount of polyacrylamide can be varied to affect the degree of brightness of the coating. Moreover, applicant teaches that 1 g/l of polyacrylamide, which is the amount used by Martin, results in inventive coatings. See Specification (page 5, lines 11-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to vary the degree of brightness in the coatings of Martin, as desired, and thereby affect the amount of polyacrylamide in the zinc coating. It would have been obvious to one of ordinary skill in the art at the time of the invention to effectuate this variation by changing plating conditions. Since applicant teaches that coatings applied at 1 g/l, which is Martin's concentration, form inventive coatings, it would be expected, absent evidence to the contrary, that some of these obvious coatings would be encompassed by the claimed amounts of polyacrylamide. Martin does not teach further coating with a protective organic layer. Shindou et al. teaches coating a zinc plated steel sheet with organic epoxy, polyester, or urethane coating to provide corrosion resistance. See Shindou et al. (col. 9, lines 45-48; col. 14, line 63 through col. 15, line 11; and Table 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to further coat the zinc plated


steel sheet of Martin with organic coatings, such as those of Shindou et al., in order to provide corrosion resistance to the sheet of Martin.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa
29 September 2006



MICHAEL E. LAVILLA PH.D.
PRIMARY EXAMINER